2008 Enhancement Activity Summary	
Title	**Description**
Agricultural Odor	Use manure management, feed management, and control and treatment of exhausts from confined animal facilities to reduce the production and transport of odorous compounds through the air.
Ozone Precursors	Control ozone precursors (nitrogen oxides, volatile organic compounds) by reducing chemical and fuel volatilization, controlling emissions from animals and their manures, utilizing lower emitting power sources, and minimizing nitrogen emissions from soils.
Particulate Matter	Airborne particulate matter (both coarse and fine) can be managed through these types of activities: Minimize soil disturbance through reduced or no till to control wind erosion; treat unpaved roads and other traffic areas with a dust control palliative to reduce dust generation; control ammonia emissions from soils and animals to control production of airborne nitrate (a source of particulate matter); use appropriate smoke management strategies when performing burning.
Energy Audit Agricultural Operations	An energy audit identifies and evaluates energy management opportunities on the farm or ranch. The audit quantifies the baseline energy use, identifies major conservation opportunities, and assesses costs and savings of implementing recommended changes.
Recycle 100% of Waste Lubricants on Farm	Used or excess lubricants, including waste oils are delivered to permitted recycling centers for re-refinement or reprocessing.
Renewable Energy Generation	Electricity is generated for on-farm use by way of wind turbine, solar panels and/or small hydro systems.
Monitoring	Measurement, recording, and interpretation of changes in soil and plant conditions to evaluate and refine management decisions to evaluate effects of current management on soil and plant conditions and refine management strategies as needed.
Grazing Management	Implementation of at least two of the following activities: 1) Rotation of salt, mineral, and supplemental feeding areas; 2) Utilize decision support tools to aid in grazing management; 3) Improve soil quality and plant condition through management of pasture legume species composition decision making; 4) Utilize grazing management plans that provide 60% or greater rest periods during growing season; 5) Prescribed burning patterns to improve wildlife habitat diversity

Cropped Woodland Improvement	Forest stand improvement of cropped woodlands to optimize growth and health of overstory and understory. Includes manipulation of species composition, stand structure and stocking rates to achieve desired results while maintaining a healthy forest ecosystem.
Soil Conditioning Index Thresholds	A base level SCI is determined for each watershed that must be exceeded in order to earn an enhancement. An enhancement is paid for costs of practices that produce increases in SCI scores above the base level in 25% increments. SCI has been shown in NRCS validation testing to be linked to soil carbon change. Setting watershed thresholds for minimum SCI eliminates climatic bias. Thresholds are determined using a standardized procedure to ensure equity. This updates the existing SQI enhancement.
Compaction Avoidance through Controlled Traffic	Controlled traffic helps avoid soil compaction problems, which are linked to increased runoff and sedimentation and reduced yields. The enhancement pays for a fraction of the cost to implement controlled traffic practices.
Drainage Water Management	Drainage water management activities control the level and timing of drainage water out of fields with either surface or subsurface drainage.
Salinity Management	Level 1 - Assessment activities to determine the extent and severity of salinity problems using EC testing of soil and irrigation water. Level 2 - Conduct EMI mapping of fields subject salinity contamination.
Irrigation Management	Incremental improvements in irrigation efficiency by changing irrigation method and/or management.
Field Poly Tubing and Drip Tape Recycling	Participate in a field poly tubing or drip tape recycling program in which the producer rolls up his used field poly tubing or drip tape, stores it at an on or off-site location approved by the recycling company until being picked up.
Remote Monitoring of Irrigation Pumping Plant	The pumping plant monitoring system includes installation of necessary sensors and communication package at the pump with an automated recording and communication system. When combined the system monitors the status of the watering system and notifies the owner/manager of system changes.
Reduction of Evaporative Losses	Use of methods (mulches, windbreaks, maintenance of high surface residue levels and night time application of irrigation water) to reduce evaporative losses as an integral part of an irrigation water management (IWM) system.

Nutrients	When enrolled in the Conservation Security Program (CSP), the producer can receive payments for applying enhancement activities for Nutrient Management and Waste Utilization. Payments for enhancement activities are subject to CSP payment caps. Acceptance of this enhancement requires a participant to develop or maintain a Nutrient Management plan (NRCS 590) OR a Comprehensive Nutrient Management Plan (CNMP) and a minimum of 2 nutrient management enhancements. The enhancements must go beyond basic nutrient management by including a higher level of management. Eligible nutrient management enhancements must be in addition to or over and above activities documented in the Soil and Water Quality Eligibility Tool.
Pesticides	Acceptance of this enhancement requires a participant to apply and/or maintain a high level Integrated Pest Management (IPM) system or 2 or more pesticide risk mitigation activities applicable to all enterprises. A high level IPM system must go beyond basic pest management by including pest prevention and avoidance mitigation techniques, and only utilize pest suppression techniques when pest monitoring indicates that an economic pest threshold has been exceeded. Mitigation techniques include both IPM management techniques and Conservation Practices. Appropriate mitigation is selected based on environmental risk evaluation with tools like the Revised Universal Soil Loss Equation 2 (RUSLE 2) for evaluating the use of tillage for weed control, and the NRCS Windows Pesticide Screening Tool (WIN-PST) for evaluating the use of pesticides. Cultural and biological control techniques as well as lower risk pesticides and lower risk pesticide application techniques are used when they are efficacious and cost effective. If the requirement for two or more pesticide risk mitigation activities is used for this enhancement payment, then the two activities must be in addition to or over and above activities documented in the Soil and Water Eligibility Tool. (See questions 10, 11, 13, 14, 16, 17, 19, and 20).
Shallow Water Habitat Management	Create shallow wetland habitats for use by amphibians, reptiles, and other species to complete their life requisites (e.g., reproduction and feeding) and to provide a water source for other wildlife species and aquatic insects. These shallow (average 6-18 inches deep but not to exceed 30 inches) aquatic habitats will be buffered by perennial vegetation dense enough to retard erosion and trap sediments before entering the shallow water habitat.
Widening of Buffers to Enhance Upland and Aquatic Habitat	Widen existing conservation buffers (e.g., filter strips, riparian buffers, grassed waterways, field borders) that currently meet NRCS practice standard criteria for the intended purpose by at least 30 feet. The extension will be composed of at least 5 species of non-noxious, wildlife friendly grasses, perennial forbs, shrubs, and\or trees best suited to site conditions to provide food and cover for native species, and game species as appropriate, and to enhance aquatic habitat by providing shade, input of wood or carbon to the stream, or streambank conditions.

Pollinator Areas	Establish new or diversify existing habitat areas, including conservation buffers, borders, edges, edges, corridors, or patches, with flowering plants (forbs, legumes, shrubs, vines, and trees). A minimum of 10 different species of native flowering plants (annuals and perennials) that provide bloom diversity over the entire growing season will compose greater than 40% of the stand. Compensation will be on a per acre basis.
Fish and Wildlife Structures	Construct or place structures such as bird boxes, bat boxes, brush piles, or instream structures (logs, rocks, lunkers) that provide nesting, roosting, wintering, or hiding cover for terrestrial or aquatic species. The structures will be designed for species found in the area and will be sited within or adjacent to appropriate habitat/cover. The structures will be placed only where sufficient structure (natural or man-made) or habitat complexity does not exist. The number and density of structures will be based upon recognized management guidelines for targeted species, but will be limited to a maximum of two per acre or 10 per contract.
Managing Riparian Zones	Incorporate conservation measures to protect fish and wildlife habitat in riparian zones of rivers, streams, isolated wetlands, ponds, floodplain wetlands, and lakes. These measures include employment of timed grazing regimes to accommodate seasonal and life history needs of both terrestrial and aquatic species (such as ground-nesting birds, neotropical migrants, fish, amphibians, riparian reptiles, and other species of concern); fencing to protect sensitive or recovering riparian vegetation, stream banks, and water quality; re-location of equipment or activities out of riparian zones and floodplains; riparian forest management to encourage recruitment of large trees to the stream or river, and retention of snags and downed wood for riparian wildlife; and removal of fish passage barriers. The number of actions/measures will be based on recognized management guidelines for targeted species, but will be limited to a maximum of 2 per acre or 10 per contract.
Wildlife Friendly Haying Management	Incorporate conservation measures in hayland to provide a variety of habitat conditions in patches to maximize wildlife use. These measures include employment of timed haying and to avoid periods when upland wildlife are nesting or fawning, idling hayland during the nesting or fawning period, leaving a residual forage height conducive to wildlife nesting and fawning for the following year, interseeding of native legumes and forbs or conversion of exotic pasture/hayland plantings to a mixture of species which meets the life history needs of the targeted grassland wildlife species